

REMARKS

In the outstanding final Office Action of May 25, 2004, the Examiner rejected claims 1, 10, 19, and 23 under 35 U.S.C. § 102(b) as allegedly being anticipated by U.S. Patent No. 5,765,112 to Fitzgerald et al. ("Fitzgerald"); rejected claims 20-21 and 24-25 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Fitzgerald in view of U.S. Patent No. 5,878,369 to Rudow et al. ("Rudow"); and objected to claims 2-9, 11-18, 22, and 26 as being dependent upon a rejected base claim.

Applicant notes with appreciation that claims 2-9, 11-18, 22, and 26 have been indicated as containing allowable subject matter.

102 REJECTION OF CLAIMS 1, 10, 19, AND 23

On page 2 of the final Office Action, the Examiner rejected claims 1, 10, 19 and 23 under 35 U.S.C. § 102(b) as allegedly being anticipated by Fitzgerald. Applicant respectfully traverses the rejection.

Claim 1 recites a method for optimizing radio coverage in a radio communication network. The radio communication network includes a plurality of base station receivers coupled to a switch for communication with at least one mobile station. The method includes querying the switch for data related to the radio coverage provided by the communication network, sending the data to a monitoring device, and generating and displaying a report related to the data received by the switch. The report indicates areas of the communication network that provide sufficient, deficient or redundant radio coverage in the communication network.

A proper rejection under 35 U.S.C. § 102 requires that a reference teach every aspect of the claimed invention either explicitly or impliedly. Any feature not directly taught must be

inherently present. See M.P.E.P. § 2131. Fitzgerald does not disclose or suggest the combination of features recited in Applicant's claim 1.

For example, Fitzgerald does not disclose or suggest querying the switch for data related to the radio coverage provided by the communication network, as recited in claim 1. On page 2 of the Office Action, the Examiner relied on Fitzgerald at Fig. 1 and column 4, lines 20-29 to disclose this feature.

Fig. 1 discloses a block diagram of a two-way communication network (see Fitzgerald at column 6, lines 22-23). Fitzgerald at column 4, lines 20-29 states:

The calling stations provide an interface for the customers of the system. They include a platform such as a personal computer and modem, for accepting a request from a customer for communication with a particular remote field unit, reporting the request to the MOC, receiving the field unit's report from the MOC, and then displaying the report back to the customer. The calling stations are connected to the MOC through any convenient method, such as by modem connected to the public switched telephone network (PSTN).

Thus, Fitzgerald discloses that customers may initiate a communication with a particular field unit. Applicant notes that Fitzgerald discloses, in more detail, the customer initiating the communication, at column 7, lines 23-42, which states:

In operation, a customer of the system 10 uses one of the calling stations 20 to initiate a request to communicate with a particular one of the field units 50a, such as a request for the field unit 50a to report its physical location. The customer's request is communicated over the network 25 to the MOC 30, which in turn forwards the request to the field unit 50a using one or more of the outbound messaging sub-systems 40. To coordinate use of a particular one of the inbound links 55a, the MOC determines a frequency and time for the field unit 60 to use which is reported as being available at some number of the base stations 60. The outbound message on an outbound link 45a thus consists of data indicating the frequency and time at which the remote field unit 50a may signal the radio base stations 60 with its information. At the indicated time and frequency, a message is received from the field unit 50a by one or more of the base stations 60 [sic], and the message is then forwarded to the MOC 30. The MOC 30, in turn, then supplies the requested data to the customer at calling station 20a over the network 25.

Thus, Fitzgerald discloses that a customer uses a calling station 20a to initiate a request, such as a request for a field unit to report its location. The request passes through PSTN 25 to message operations control (MOC) 30, which forwards the request to the field unit via one or more messaging sub-systems 40. One or more base stations 60 receive the response from the field unit, including the field unit's location, and forwards the response to MOC 30, which, in turn, forwards the response to calling station 20a. Nowhere in these sections, or elsewhere, does Fitzgerald disclose that calling station 20a queries MOC 30 for data related to radio coverage provided by the communication network, as alleged by the Examiner. Calling station 20a merely passes the request for the particular field unit's location to MOC 30 for forwarding to the field unit, which responds to the request by passing the request through MOC 30 to calling station 20a.

Further, Applicant submits that Fitzgerald does not disclose or suggest generating and displaying a report related to the data received by the switch, where the report indicates areas of the communication network providing sufficient, deficient or redundant radio coverage in the communication network, as recited in claim 1.

On pages 2-3 of the outstanding Office Action, the Examiner alleges that Fitzgerald discloses this feature in the Abstract, Fig. 1, and column 4, lines 20-29. The Abstract of Fitzgerald states:

A two-way communications system that provides ubiquitous wireless data communication services, such as throughout the continental United States, by using a network of only a few, widely distributed radio base station (RBS) sites and the existing paging network infrastructure. The paging network infrastructure is used as an outbound link to request data from the remote field units. The outbound page message indicates a time and frequency at which the RBSs can expect to receive data from the field units. A network hub or message operations center (MOC) coordinates the operation of the paging systems and RBSs from a central location. For example, the MOC determines an available HF frequency

and time for a particular field unit to transmit, and then issues the request for data to the field unit using the existing paging network infrastructure. The field units make use of paging receivers, and an HF transmitter to report remote data such as a geoposition or other sensor data when requested to do so.

Thus, Fitzgerald discloses field units using paging receivers and an HF transmitter to report data such as a geoposition or other sensor data when requested to do so.

As stated previously, Fitzgerald at column 4, lines 20-29, discloses passing a request for a field unit's location from calling station 20a through MOC 30 to the field unit and receiving a response passed through MOC 30 from the field unit to calling station 20a.

The Examiner appears to equate displaying the field unit's reported position at the calling station with displaying a report related to the data received by the switch, where the report indicates areas of the communication network providing sufficient, deficient or redundant radio coverage in the communication network. However, the report concerns a single field station and therefore cannot indicate areas of the communication network providing sufficient, deficient or redundant coverage in the communication network. Further, Fitzgerald does not disclose or suggest that the displayed report indicates whether the communication network provides, sufficient, deficient or redundant coverage. For example, Fitzgerald discloses that a response may be received by more than one base station, but Fitzgerald does not disclose or suggest that an indication of receipt of the response by multiple base stations is provided to calling station 20a. Further, Fitzgerald is silent regarding reporting to calling station 20a a strength or a signal to noise ratio of a signal received from the field unit. Therefore, Applicant submits that Fitzgerald does not disclose generating and displaying a report related to the data received by the switch, where the report indicates areas of the communication network providing sufficient, deficient or redundant radio coverage in the communication network, as recited in claim 1.

For at least these reasons, claim 1 is not anticipated by Fitzgerald.

Claim 10 is directed to a system and recites features similar to the features of claim 1. For example, claim 10 recites a monitoring device that is configured to query the switch for data related to radio coverage provided by the base station receivers and to generate and to display a report related to the data received by the switch, where the report indicates areas of the system providing sufficient, deficient or redundant radio coverage by the base station receivers. Applicant submits, at least for similar reasons to those provided with respect to claim 1, that claim 10 is not anticipated by Fitzgerald.

Claims 19 and 23 depend from claims 1 and 10, respectively, and are not anticipated by Fitzgerald, at least for the reasons discussed above regarding claims 1 and 10. Because Fitzgerald does not disclose each and every feature of the claims, Applicant respectfully requests that the rejection of claims 1, 10, 19 and 23 be withdrawn.

103 REJECTION OF CLAIMS 20-21 AND 24-25

On page 3 of the final Office Action, the Examiner rejected claims 20-21 and 24-25 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Fitzgerald in view of Rudow. Applicant respectfully traverses the rejection.

Claims 20-21 depend from base claim 1 and claims 24-25 depend from base claim 10. Applicant submits that Fitzgerald does not disclose or suggest the features of querying the switch for data related to the radio coverage provided by the communication network, and generating and displaying a report related to the data received by the switch, where the report indicates areas of the communication network providing sufficient, deficient or redundant radio coverage in the communication network, as recited in claim 1, for the reasons discussed above with respect to claim 1. Applicant submits that the features of claim 10 are similar to these features of claim 1

and that Fitzgerald does not to disclose or suggest these features for reasons similar to those discussed with respect to claim 1.

Rudow relates generally to a golf course yardage and information system (see Rudow, at column 1, lines 8-10). However, the disclosure of Rudow also does not to satisfy the deficiencies in the disclosure of Fitzgerald. Therefore, Applicant submits that claims 20-21 and 24-25 are patentable over Fitzgerald in view of Rudow and respectfully requests that the rejection be withdrawn.

OBJECTION OF CLAIMS 2-9, 11-18, 22, AND 26

On page 3 of the final Office Action, the Examiner objected to claims 2-9, 11-18, 22, and 26 as being dependent upon a rejected base claim. Applicant submits that the claims depend from allowable claims for the reasons discussed above. Therefore, Applicant respectfully requests that the objection to claims 2-9, 11-18, 22, and 26 be withdrawn.

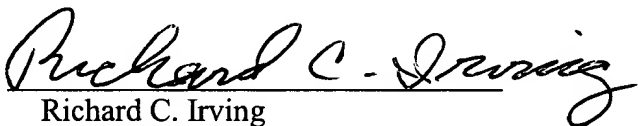
CONCLUSION

Applicant submits that claims 1-26 are allowable and a notice to that effect is earnestly solicited.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 13-2491 and please credit any excess fees to such deposit account.

Respectfully submitted,

HARRITY & SNYDER, L.L.P.

By: 
Richard C. Irving
Reg. No. 38,499

11240 Waples Mill Road
Suite 300
Fairfax, Virginia 22030
(571) 432-0800

Date: July 14, 2004